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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,546	12/05/2003	Hisayoshi Tsubaki	2091-0302P	7320

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EXAMINER

PETERSON, CHRISTOPHER K

ART UNIT	PAPER NUMBER
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2622

NOTIFICATION DATE	DELIVERY MODE
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12/16/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/727,546	Applicant(s) TSUBAKI, HISAYOSHI	
	Examiner CHRISTOPHER K. PETERSON	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-9 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-9 and 12-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted and was filed on 8/19/2008. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Amendment

2. The Amendment After Non-Final Rejection filed on 9/12/2008 has been received and made of record. Examiner notes that the Applicant has added new claims 22 – 25 and amended claims 1, 3, 18, and 21. Claims 1 - 4, 7 - 9, 12 - 25 are pending in this application.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 12, and 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 3 and 19 recites the limitation "imaging communication device" in Page 3, line 3, and Page 6, line 4. There is insufficient antecedent basis for this limitation in the claim. Claim 1 cites an "imaging communication means".

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1 - 3, 7 - 9, 12 - 16, and 18 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku (US Patent Pub. # 2002/0049728) in view of Carlson US Patent # 6,694,151).

As to claim 1, Kaku teaches an imaging system for interaction with one or more subject carried terminal devices (transmitter 360), the one or more terminal devices (360) including a display capable of displaying images and a communication device to enable communication therewith, the imaging system comprising (Para 197 and 25). Kaku teaches a transmitter with an ID card and a cellular phone. A cellular phone is well known in the art to have a display:

at least one imaging means (camera 40) for photographing a subject carrying a terminal device (360) and for obtaining image data representing an image of the subject (Para 179);

an imaging communication means (ID card and cellular phone) included with each associated imaging means (40) for providing wireless data communication with the subject carried terminal devices (360). Kaku teaches the transmitter (360) may include an IC card and a cellular phone (Para 25).

a control means (receiver 370) for controlling the operation of the imaging means (40) so that the imaging means (40) is driven to obtain image data when the terminal device (360) carried by the subject (character) and the imaging communication means (ID card and cellular phone) become able to communicate with each other to determine the subject (character) is within the image data to be obtained by the imaging means (40) (Para 179); and

wherein the imaging communication means (ID card and cellular phone) and the associated imaging means (40) are arranged so that a data communication direction of the imaging communication means (ID card and cellular phone) and an imaging direction of the imaging means (40) are substantially identical. Kaku teaches at least one of the radio waves transmitted and received between the transmitter and the receiver is directive (Para 27).

wherein the imaging communication means (ID card and cellular phone) and the associated imaging means (40) are arranged so that the data communication range of the imaging communication means (ID card and cellular phone) is substantially within an imaging angle of view of the associated imaging means (40) (Para 27).

Kaku teaches at least one of the radio waves transmitted and received between the transmitter and the receiver is directive (Para 27). For clarity purposes the Carlson reference teaches digital camera that incorporate digital wireless RF communication systems operating in a microwave band such as the 2.4 to 2.5 GHz ISM (Industrial Scientific and Medical) Band. Such communication is useful, for example, for sending digital imaging data at high data rates; e.g.

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rates equal and greater than 10 Mega bits per second (Mbps) (Col. 1, lines 7 – 13). Carlson (Fig. 5) teaches a faraday cage (54) on the inside of the camera body (56) (Col. 5, lines 8 – 24). Carlson teaches an imaging communication means (antenna elements 42 and 48) is substantially within an imaging angle of view of the associated imaging means (camera 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a directional antenna mounted in a camera body with a faraday cage as taught by Carlson to the receiver and camera of Kaku, because antenna apparatus for digital cameras that incorporates wireless RF transceivers for communicating digital images and an improved means of transmission and reception when operating in microwave bands in the presence of signal absorption and multipath fading and the effects of the human body (Col. 3, lines 18 – 23).

As to claim 2, Kaku (Fig. 3) teaches the imaging device as defined in claim 1, wherein the control means (40) is a means for recognizing the unique identification code (character ID) that specifies the terminal device (360) carried by the subject (character) to the image data (Para 106 and 130). Kaku teaches a character ID which is assigned to each of the characters who use the image distributing system is recorded in the character information database 110.

As to claim 3, Carlson teaches the imaging device (digital camera 12) as defined in claim 1, wherein the control means (microprocessor 18) is a means for further controlling drive of the imaging communication means (transceiver 10) so that the imaging communication device (10) transmits the image data obtained

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by the imaging means (12) to the terminal device (other cameras and communication devices) (Col. 4, lines 15 - 28).

As to claim 7, Moores teaches the imaging device as defined in claim 1, wherein the control means (40) is a means for controlling the drive of the imaging means so that photography is prohibited after a predetermined number of images have been photographed continuously (Para 132).

As to claim 8, Kaku teaches the imaging device as defined in claim 1, wherein the control means (40) is a means for controlling the drive of the imaging means so that imaging is prohibited for a predetermined time after photography (Para 132).

As to claim 9, Moores teaches the imaging device as defined in claim 1, wherein the control means (20) is a means for controlling the drive of the imaging means so that the imaging means (15) performs photography only when the terminal device (123) gives an instruction to perform photography (Para 0024). Moores teaches a button or a switch be provided. A PDA has multiple switches and buttons that could perform this function.

As to claim 12, Kaku teaches an imaging system comprising:
a terminal device (transmitter 360) carried by the subject and operatively connected to a controller (receiver 370), wherein the terminal device (360) includes an integral terminal communicator (cellular phone) to communicate a unique identification code (character ID) to the controller when the terminal device (360) is within the operative range of one or more cameras (40) and also includes a display (on cellular phone) to display the images obtained by the one

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or more cameras (40) (Para 197 and 25). Kaku teaches a transmitter with an ID card and a cellular phone. A cellular phone is well known in the art to have a display.

the controller (370) to receive the unique identification code (character ID) from the terminal device (360), to drive the one or more cameras (40) to record one or more image of the subject (character);

one or more cameras (40) for obtaining images of the subject (character) operatively connected to the controller (370);

wherein images of the subject which are obtained by the one or more cameras (40) are transmitted to for display on the terminal device (360) carried by the subject (character); and

wherein said controller (370) drives one or more of said cameras (40) only when said terminal device (360) is within the field of view of one or more of said cameras (40).

Kaku teaches at least one of the radio waves transmitted and received between the transmitter and the receiver is directive (Para 27). For clarity purposes the Carlson reference teaches digital camera that incorporate digital wireless RF communication systems operating in a microwave band such as the 2.4 to 2.5 GHz ISM (Industrial Scientific and Medical) Band. Such communication is useful, for example, for sending digital imaging data at high data rates; e.g. rates equal and greater than 10 Mega bits per second (Mbps) (Col. 1, lines 7 – 13). Carlson (Fig. 5) teaches a faraday cage (54) on the inside of the camera body (56) (Col. 5, lines 8 – 24). Carlson teaches an imaging communication means (antenna

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elements 42 and 48) is substantially within an imaging angle of view of the associated imaging means (camera 12). Carlson teaches the control means (microprocessor 18) is a means for further controlling drive of the imaging communication means (transceiver 10) so that the imaging communication device (10) transmits the image data obtained by the imaging means (12) to the terminal device (other cameras and communication devices) (Col. 4, lines 15 - 28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a directional antenna mounted in a camera body with a faraday cage as taught by Carlson to the receiver and camera of Kaku, because antenna apparatus for digital cameras that incorporates wireless RF transceivers for communicating digital images and an improved means of transmission and reception when operating in microwave bands in the presence of signal absorption and multipath fading and the effects of the human body (Col. 3, lines 18 – 23).

As to claim 13, Carlson teaches the imaging system as defined in claim 12, comprising: a plurality of the imaging devices (camera 12) having imaging ranges which overlap, wherein the control means (microprocessor 18) in each of the imaging devices (12) is means for controlling the drive of the imaging device communication means (transceiver 10) and the imaging means (12), so that when all the plurality of the imaging devices (12) have become able to communicate data with the terminal device (other cameras and communication devices), the imaging means (12) in the plurality of the imaging devices (12) take respective photographs (Col. 4, lines 15 - 28).

As to claim 14, Kaku teaches the imaging system as defined in claim 12, further comprising: an image server (image database 120) for storing the images obtained by the one or more cameras (40) (Para 130).

As to claim 15, Kaku (Fig. 1) teaches the imaging system as defined in claim 12, further comprising: a printer (output unit 60) for printing out the image data obtained by the imaging device (40) (Para 105).

As to claim 16, Kaku (Fig. 15) teaches the imaging system as defined in claim 15, wherein the printer (60) only prints out the image data for which an instruction to print has been issued (Para 104 and 105). Kaku teaches the output processing unit 100 executes a process of printing the appointed image on paper.

As to claim 18, this claim refers to the limitations of claim 12. Thus claim 18 is analyzed as previously discussed with respect to claim 12.

As to claim 19, Kaku teaches wherein a said imaging means (40) has an angle of view (image capturing region) and said imaging communication means (ID card and cellular phone) has a directional angle of communication (370) which produces a sensing area substantially within the angle of view of the said imaging means (40) (Para 179 and 27). Note the discussion in claim 1 regarding this limitation.

As to claim 20, Kaku teaches wherein a said one of the one or more cameras (40) has an angle of view (image capturing region) and where the controller (370) includes a imaging communication device (transceiver 10 of Carlson) associated with said one of the one or more cameras (40) and having a

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directional angle of communication producing a sensing area substantially within the angle of view (image capturing region) of said one of the one or more cameras (40) (Para 179 and 27). Note the discussion in claim 1 regarding this limitation.

As to claim 21, Kaku teaches wherein imaging area of the imaging device (40) corresponds to an angle of view (image capturing region) of the imaging device (40) (Para 179).

As to claim 22, Carlson teaches wherein the imaging communication means (12) and the associated imaging means (12) are arranged to be partially shielded by an outer case (camera body 56) of the imaging means (12) so that the data communication range of the imaging communication means (12) is substantially limited to be within an imaging angle of view of the associated imaging means (12). Carlson teaches an antenna elements (42 and 48) embedded in the camera body. A faraday cage (54) prevents the emission of electromagnetic radiation (Col. 5, lines 8 – 25).

As to claim 23 and 24, these claims differs from claim 22 only in that the claim 22 depends on claim 1 whereas claim 23 depends on claim 12 and 24 depends on claim 18. Thus claim 23 is analyzed as previously discussed with respect to claim 22 above.

As to claim 25, this claim differs from claim 18 only in that substantially was added to the claim 25. The limitation “wherein said controller drives one or more of said cameras **substantially** only when said terminal device is within the field of view of one or more of said cameras” was discussed and rejected in claim

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1. Thus claim 25 is analyzed as previously discussed with respect to claim 1 above.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku (US Patent Pub. # 2002/0049728) in view of Carlson US Patent # 6,694,151) and further in view of Moores (US Patent Pub. # 2004/0201738).

As to claim 17, Note the discussion above. Kaku teaches a cellular phone as a terminal device and Carlson teaches the camera is able to communicate with other cameras and communication devices. Kaku in view of Carlson do not teach a print instruction issued by the terminal device. Moores reference teaches a method and apparatus to provide automatic access to images captured at recreational venues. Moores teaches the imaging system as defined in claim 16, wherein the instruction to print can be issued at the terminal device (PDA) (Para 0022). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the terminal device the ability to print images taught by Moores to the image data of in view of Kaku in view of Carlson, because handling and distribution of copies of the resultant photographs has taken place by relatively rudimentary and cumbersome mechanisms (Para 4).

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaku (US Patent Pub. # 2002/0049728) in view of Carlson US Patent #

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6,694,151) as applied to claim 3 above, and further in view of Muroya (US Patent Pub. # 2004/0148404).

As to claim 4, Kaku in view of Carlson teaches the limitation "image data". Kaku in view of Carlson do not teach small capacity image data. Muroya teaches the control means is a means for generating small capacity image data of which data volume is less than the image data and transmitting the small capacity image data (thumbnails) to the terminal device (10) instead of the image data (Para 0095 – 0096). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided small capacity image data taught by Muroya to the image data of in view of Walker and further in view of Bridgelall, because the use of small capacity image data would reduce the power consumption and requires less bandwidth (Para 0037).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory

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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER K. PETERSON whose telephone number is (571)270-1704. The examiner can normally be reached on Monday - Friday 6:30 - 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Sinh can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/C. K. P./

Examiner, Art Unit 2622

25 Nov 2008

/Sinh N Tran/

Supervisory Patent Examiner, Art Unit 2622